

**MATERIALS SPECIFICATION  
FOR  
FABRICATED STEEL TAPPING SLEEVES**

**FOR USE ON 4 INCH THROUGH 20 INCH NOMINAL DIAMETER PIPE**

1. General Requirements:

The manufacturer of the tapping sleeves shall be experienced in their design and construction, shall be regularly engaged in their manufacture, and shall have produced tapping sleeves of the sizes specified herein which have given successful service for a period of at least 5 years.

2. Service:

The tapping sleeves will be installed on the following types of pipe: (1) Cast Iron, (2) Ductile Iron, (3) Asbestos-Cement and (4) Polyvinyl Chloride (PVC).

The operating pressure for all 4 types of water pipe is 150 pounds per square inch (gauge).

3. Material:

All steel plate used in fabrication of the tapping sleeves shall conform to ASTM A 36 or A 285, Grade C.

4. Flanges:

Flanges shall be fabricated from steel plate, and all dimensions shall conform to AWWA C207, Class D. Flanges shall be machined to a flat surface with a serrated finish in accordance with AWWA C207. In addition, the machined face shall also be recessed for tapping valves in accordance with the MSS SP-60.

5. Gaskets:

Gaskets shall be compounded from new materials, and the shape of cross-section of gasket shall provide adequate seal for the design pressure. Gaskets shall be shop glued to the groove provided in the body section.

6. Fasteners:

Bolts and hex nuts shall be Stainless Steel, Usalloy, Dresserloy, Cor-Ten, ductile iron Durabolt or an approved equal for corrosion control.

7. Testing Outlet:

A 3/4 inch NPT by welded coupling shall be attached to the outlet nozzle of each tapping sleeve assembly complete with a 3/4 inch square head pipe plug.

8. Painting:

All surfaces of the sleeve shall be clean, dry and free from grease and dirt before painting. All surfaces of tapping sleeve except face of flange, bolts and nuts, shall be given a shop coat of manufacturer's standard coating. Face of flanges shall be shop coated with a rust preventive compound. Bolts and nuts shall be shipped bare, without paint or protective coating.

9. Certification:

The manufacturer shall furnish a sworn statement that the inspection and all of the specified tests have been made and the results thereof comply with the requirements of the applicable Standard(s) herein specified. A copy of the Certification including compliance with NSF Standard 61 shall be sent to Denver Water.

10. Acceptable Manufacturers:Fabricated Steel

Ford Model FTSS  
International Style 228  
Romac FTS 420  
Smith-Blair Model 622  
J.C.M. Model 412

Stainless Steel

J.C.M.-Model JCM 432  
Power Seal - Model 3490  
Cascade Style CST